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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/965,769 | 09/27/2001 | Marietta B. Helmeke | DD-043-US-01 | 3420 |

7590 12/05/2002

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EXAMINER

SHORT, PATRICIA A

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 12/05/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | | | |
|-----------------|-----------|----------------|---------------|
| Application No. | 09/965769 | Applicant(s) | Heimke et al. |
| Examiner | Shurt | Group Art Unit | 1712 |

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

Responsive to communication(s) filed on _____.

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

Claim(s) 1 - 29 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1 - 29 is/are rejected.

Claim(s) _____ is/are objected to.

Claim(s) _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The proposed drawing correction, filed on _____ is approved disapproved.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Attachment(s)

Information Disclosure Statement(s), PTO-1449, Paper No(s). 4 Interview Summary, PTO-413

Notice of Reference(s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152

Notice of Draftsperson's Patent Drawing Review, PTO-948 Other _____

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are confusing in that claim 1 requires a thermoplastic polyurethane as part of the polyol component. Is the thermoplastic polyurethane a polyol? If not, then in what sense is it part of the polyol component? Do the claims require the reaction of the polyol component and the polyisocyanate component to take place in the presence of the thermoplastic polyurethane?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heider in view of Brauer. Heider teaches hot melt moisture curable polyurethane adhesives that comprise polyurethane prepolymer prepared by reacting a polyisocyanate and a polyol component that comprises mixtures of polyesters that include partially crystalline polyester and amorphous polyester. The adhesives have good green strength, creep resistance and bond strength. Exemplified polyesters include amorphous polyester prepared from phthalic acid/anhydride and glycol mixtures including neopentyl glycol, partially crystalline polyesters having a melting point of 40 to 70° C and liquid high viscosity polyesters having a viscosity of greater than about 10,000

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cps at 80° C. See col. 5, line 25 through col. 6, line 15 and examples. Brauer teaches that thermoplastic polyurethane improves the green strength of a moisture curable polyurethane adhesive comprising polyurethane prepolymer prepared by reacting polyisocyanate and polyol. See col. 1, lines 35-62 and col. 4, lines 4-28. In view of Brauer, it would have been obvious to add a thermoplastic polyurethane to the moisture curable polyurethane adhesive of Heider comprising a polyurethane prepolymer prepared by reacting a polyisocyanate with a mixtures of polyesters such as amorphous polyester polyol comprising the reaction product of phthalic acid/anhydride with neopentyl glycol/hexanediol, liquid high viscosity polyesters having a viscosity of greater than about 10,000 cps at 80° C and partially crystalline polyesters having a melting point of 40 to 70° C in order to obtain further improvements in green strength of the polyurethane adhesive.

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November 27, 2002

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